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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,928

03/22/2004

Raymond Elijah Barnett

TI-36636

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23494 7590 05/29/2009  
TEXAS INSTRUMENTS INCORPORATED  
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EXAMINER

NEGRON, DANIEL L

ART UNIT

PAPER NUMBER

2627

NOTIFICATION DATE

DELIVERY MODE

05/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/805,928	<b>Applicant(s)</b> BARNETT ET AL.	
	<b>Examiner</b> Daniell L. Negrón	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 is/are allowed.
- 6) ☒ Claim(s) 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Amendment***

1. The declaration under 37 CFR 1.132 filed January 19, 2009 is sufficient to overcome the rejection of claims 1-19 based upon Barnett et al U.S. Patent Application Publication No. 2001/0081339.

Upon further consideration, a new grounds of rejection is made in view of Lacombe U.S. Patent No. 6,496,317.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 recites "providing current pulses cooperable for individually defining a positive edge and a negative edge of the write current", which renders the claim indefinite since the terms "cooperable" and "individually" contradict each other. Examiner cannot determine whether the current pulses cooperatively or individually define the edges of the write current. Claim 18 further recites "differentially and individually varying respective amplitudes and durations", which renders the claim indefinite since the terms "differentially" and "individually" contradict each other. Examiner cannot determine whether the amplitudes and durations are varied differentially or individually. Claim 19 is rejected by virtue of its dependency on claim 18.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Lacombe U.S. Patent No. 6,496,317.

Regarding claim 18, Lacombe discloses a method of providing a write current to an inductive head element in a disk drive system, comprising providing current pulses cooperable for individually defining a positive edge and a negative edge (e.g., signals WHX and WHY) of the write current, differentially and individually varying respective amplitudes (defined by WHX and WHY) and durations of the positive edge current pulse and negative edge current pulse for counteracting induced imbalances in the write current (column 3, lines 21-25 and column 7, lines 10-17 and 27-37).

***Allowable Subject Matter***

6. Claims 1-17 are allowed.

7. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-17, claims 1 and 10 disclose a write driver comprising a circuit coupled with a head driver circuit and adapted to selectively provide first pulsing signals which individually define overshoot amplitudes of the positive write edge and the negative write edge respectively of the write current signal and second pulsing signals which individually define

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overshoot duration of the positive write edge and the negative write edge respectively of the write current signal, which is neither disclosed or an obvious variation of the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Prior Art***

The following references are cited as of interest for disclosure of write drive circuits having pulsing signals for controlling write current overshoot:

Barnett et al U.S. Patent No. 7,035,27

Van Eaton et al U.S. Patent No. 7,372,649.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniell L. Negrón whose telephone number is (571)272-7559. The examiner can normally be reached on Monday-Friday (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniell L. Negrón/  
Examiner, Art Unit 2627  
May 25, 2009